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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,284	03/01/2000	Brett A. Bernath	00CXT0330D	3468

20790 7590 05/09/2003

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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,284

Applicant(s)

BERNATH ET AL.

Examiner

Annan Q Shang

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by **Sherer et al (6,434,165)**.

As to claim 1, note the **Sherer et al** reference figures 4 and 6, disclose a communication network system that transmits and receives communication frames that include a transmission status section that indicates a communication frame transmission is aborted where cyclical redundancy check (CRC) value is created based upon the information within the a communication frame and further disclose a cable modem comprising the following: the claimed “a first interface for receiving...” is met by Receiver 421 or Cable Modem 641 and 642, note figures 4, 6 and col. 7, lines 23-35 and col. 9, lines 34-67, note that Receiver 421 of the Subscriber Equipment 420 receives data from Hub 410, note that figure 4 is implemented in figure 6, as Head end 610 that transmits/receives data to Cable Modem 641 and 642, via cable 620, the claimed “pattern matching engine...” is met by CRC Checker 423, note col. 7, line 36-col. 8, line 8, note that CRC checker 423 evaluates patterns in the data, by calculating

the CRC value base upon the received information at the first interface of the Cable, CM 641 and 642 or Subscriber Equipment 420, compares it to the value transmitted with the frame, and enables the determination of appropriate procedures for treatment of the data, note also that if the CRC values match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and if the two values do not match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and enables the MAC frame to perform its designated tasks and discard or disregard the information. Note also that the checking of data frame could be frame length in bits, bytes, etc., and by accepting and discarding frame(s), frame(s) are filtered and the cable modem is presented with only those frames that requires processing, note also col. 6, lines 11-48.

As to claim 2, Sherer further discloses where the pattern matching engine is configured to match addresses segments of data that is received at the first interface of the Cable Modem 641 or 642, note col. 9, line 47-col. 10, line 3, note that the information received at the cable modem contains also MAC address and IP address of the various devices connected to the cable modem.

As to claim 3, Sherer further discloses where the CRC Checker 423, is programmable pattern engine that may be programmed according to patterns that are desired to matched during various operations of the cable modem, Cable Modem 641 or 642, note col. 7, lines 36-col. 8, line 8 and col. 9, lines 34-67, note that the CM 641 or 642 is synchronizes with the Headend 610 as such the CRC Checker 423 is programmed to accepted the various predetermined patterns.

As to claim 4, Sherer further discloses where CRC Checker 423 determines whether to accept a frame at the cable quicker than if the cable modem were required to wait on processing at a central microprocessor, inherent to SE 420 or Cable Modem 641 or 642, note col. 6, lines 10-29.

As to claim 5, Sherer further discloses where CRC Checker 423, enables pattern matching of various length frame portions, note col. 8, lines 24-65.

As to claim 6, Sherer further discloses where CRC Checker 423, where the various length frame portions are selected from the group consisting of bit length, byte length, etc., note col. note col. 8, lines 24-65.

As to claim 7, note the **Sherer et al** reference figures 4 and 6, disclose a communication network system that transmits and receives communication frames that include a transmission status section that indicates a communication frame transmission is aborted where cyclical redundancy check (CRC) value is created based upon the information within the a communication frame and further disclose a communication device for sending and receiving data. The claimed communication device comprising... is met as follows: the claimed "a receiving transducer...is met by Receiver 421 or Cable Modem 641 and 642, note figures 4, 6 and col. 7, lines 23-35 and col. 9, lines 34-67, note that Receiver 421 of the Subscriber Equipment 420 receives/sends data from Hub/to 410, note that figure 4 is implemented in figure 6, as Head end 610 that transmits/receives data to Cable Modem 641 and 642, via cable 620, the claimed "pattern matching engine..." is met by CRC Checker 423, note col. 7, line 36-col. 8, line 8, note that CRC checker 423 is configured to prevent the communication

device from processing data that matches a predetermined pattern, by calculating the CRC value base upon the received information at the first interface of the Cable, CM 641, 642 or Subscriber Equipment 420, and comparing it to the value transmitted with the frame; note that predetermined pattern is set at the Hub 410 or Head end 610, note also that if the CRC values match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and if the two values do not match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and enables the MAC frame to perform its designated tasks and discard or disregard the information. Note also that the checking of data frame could be frame length in bits, bytes, etc., and also by accepting and discarding frame(s), frame(s) are filtered and the cable modem is presented with only those frames that requires processing, note also col. 6, lines 11-48.

As to claim 8, Sherer further discloses where the communication device, is a cable modem, Cable Modem 641 or 642, note col. 9, lines 34-45.

As to claim 9, Sherer further discloses where the communication device where the receiving transducer receives the data from a cable media, note col. 9, lines 34-45.

Claim 10 is met as previously discussed with respect to claim 3

As to claim 11, note the **Sherer et al** reference figures 4 and 6, disclose a communication network system that transmits and receives communication frames that include a transmission status section that indicates a communication frame transmission is aborted where cyclical redundancy check (CRC) value is created based upon the information within the a communication frame and further disclose a method for a communication device to compare a predetermined pattern to a pattern that

corresponds to a portion of a data frame. The claimed method comprising...is met as follows; the claimed "determining acceptable parameters for the data frames..." is met by Receiver 421 or Cable Modem 641 and 642, note figures 4, 6 and col. 7, lines 23-35 and col. 9, lines 34-67, note that Receiver 421 of the Subscriber Equipment 420, determines acceptable parameters for data frames that are to be received at Subscriber Equipment 420, note that figure 4 is implemented in figure 6, as Head end 610 that transmits data to Cable Modem 641 and 642, via cable 620; Receiver 421 programs the acceptable parameters into CRC Checker 423, pattern matching engine of the Subscriber Equipment 420, a Communication Device, note col. 7, lines 23-35; Receiver 421 further receives data frame and CRC Checker 423, parses the data frame to obtain a predetermined portion of the data frame, and compares the predetermined portion of the data frame with the acceptable parameters stored in CRC Checker 423, note col. 7, line 36-col. 8, line 8, note that CRC checker 423, calculates CRC value base upon the received information at the first interface of the Cable and further both SE 420/CM 641 and Hud 410/Headend 610 encapsulates data in the data communications frames, note also that if the CRC values match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and if the two values do not match, CRC Checker 423 notifies MAC frame user 412 that the information is valid and enables the MAC frame to perform its designated tasks and discard or disregard the information. Note also that the checking of data frame could be frame length in bits, bytes, etc., and also by accepting and discarding frame(s), frame(s) are filtered and the cable modem is presented with only those frames that requires processing, note also col. 6, lines 11-48.

As to claim 12, Sherer further discloses a method comprising registering the result of the comparison, in a suitable format the MAC, for access by the microprocessor, note col. 10, line 59-col. 11, line 15, note that the microprocessor is inherent to the Cable Modem 641 or 642.

As to claim 13, Sherer further discloses a method comprising reading the registered with a microprocessor such that the microprocessor may determine whether to drop or accept the data frame that has been received at the communication device, col. 7, lines 23-35 and col. 9, lines 34-67, note that the microprocessor is inherent to the Cable Modem 641 or 642.

Claim 14 is met as previously discussed with respect to claim 2.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hurvig et al (6,507,592) disclose apparatus and method for two-way data communication.

Fijolek et al (6,510,162) disclose a system and method for managing channel usage in a data over cable system.

Mao et al (6,459,427) disclose apparatus and method for web-casting over digital broadcast TV network.

Poret et al (6,424,632) disclose method and apparatus for testing packet data integrity using data check field.

James et al (6,208,645) disclose time multiplexing of cyclic redundancy functions in point-to-point ringlet-based computer systems.

Walker et al (5,553,067) disclose generation of checking data.

Bowcutt et al (6,308,328) disclose usage statistics collection for a cable data delivery system.

Broerman et al (WO 01/50706 A2) disclose application operation in an Internet compatible bi-directional communication system.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annan Q Shang whose telephone number is 703-305-2156. The examiner can normally be reached on 700am-500pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-5991 for regular communications and 703-746-5991 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service whose telephone number is 703-306-0377.



Annan Q. Shang
May 1, 2003



MICHAEL H. LEE
PRIMARY EXAMINER